

DVS-2

Digital Voice Recorder

YAESU MUSEN CO., LTD.
C.P.O. Box 1500
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Overview

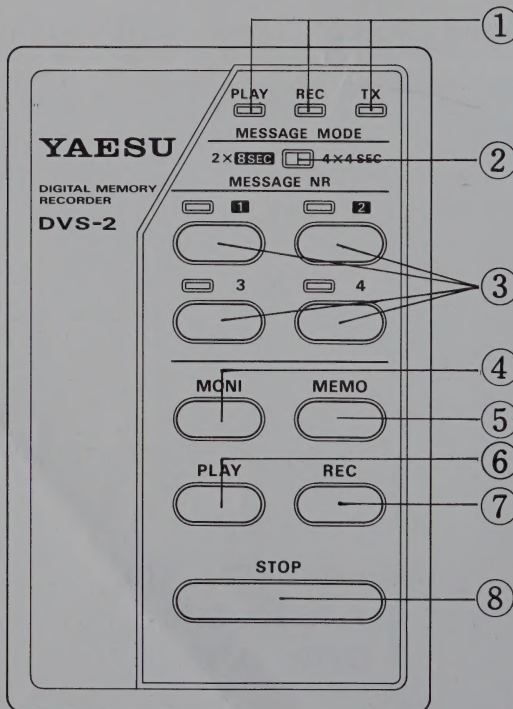
The DVS-2 is a digital voice recorder designed especially for SSB, AM and FM operation with new model Yaesu transceivers such as the FT-1000 having a special jack for connection of the DVS-2 on the rear panel. It offers two independent functions: recording received signals for playback later in the loudspeaker/headphone, and recording signals by the microphone for playback later over the air (during transmission). Each mode uses its own memory, so both modes can be used to retain data at the same time.

Installation

Connect the DVS-2 cable to the DVS-2 jack on the rear of the transceiver. You must also have a microphone connected to the **MIC** jack on the front panel of the transceiver to record your voice for transmissions.

DVS-2 Controls

(Refer to the descriptions on the facing page)



XF-110CN

CW Narrow Filter

The **XF-110CN** is a CW Narrow crystal filter for use with the Yaesu HF Transceiver.

Refer to the installation chapter of your transceiver's operating manual for details.

This filter replaces the previous "**XF-455K-251-01**" Yaesu CW Narrow filter.

Specifications

Center frequency: 455 kHz \pm 50 Hz

Selectivity ($-6/-60$ dB): 250 Hz/700 Hz

Poles: 8 poles

Dimensions (W \times H \times D) 45 \times 17 \times 23mm



YAESU MUSEN CO., LTD.

XF-110CN CWナローフィルター

八重洲無線の製品をご愛用いただき、
誠にありがとうございます。

お買い上げいただきました“XF-110CN”は、当社のHFトランシーバーに使用することのできる、通過帯域幅が250HzのCWナロー用クリスタル・フィルターです。

また、このフィルターは、当社の旧製品“XF-455K-251-01”とも『互換可能』になっておりますので、“XF-455K-251-01”を使用するトランシーバーにも取り付けることができます。

なお、取付方法は、お手持ちのトランシーバーの取扱説明書をご覧ください。

また、このフィルターの取り付けを当社営業所/サービスにご依頼になる場合には、所定の工賃を別途申し受けますのでご了承ください。

定格

中心周波数：455kHz \pm 50Hz

通過帯域幅：250Hz以上（-6dB）

減衰帯域幅：700Hz以下（-60dB）

構成素子数：8素子

外形寸法：45 \times 17 \times 23mm（W \times H \times D）

八重洲無線株式会社

E06907000(409C-AK)

(1) **PLAY, REC & TX** LEDs

These three indicators light or flash to indicate the status of the DVS-2. The **PLAY** LED glows green when playing back stored data, the **REC** LED glows yellow when recording, and the **TX** LED glows red when the DVS-2 is keying the transmitter to play back over the air. Also, the **PLAY** and **REC** LEDs flash when waiting for you to make a memory selection (with a numbered button).

(2) **MESSAGE MODE** Slide Switch

This selects the mode for recording messages to be played back over the air: for either two 8-second messages, or four 4-second messages. Changing your selection does *not* erase previously stored messages, so you can use this switch to combine two pairs of 4-second messages.

(3) **MESSAGE NR** Selection Buttons & LEDs (1 through 4)

These buttons select which message to record via the microphone or play back over the air. The LED above each button glows red when a message has been stored in that slot. The **3** and **4** keys (and LEDs) are only functional when the **MESSAGE MODE** switch is set to the **4 x 4 SEC** position.

(4) **MONI** Button

After recording a message via the microphone, press this button (followed by a message number button) to play back that message in the loudspeaker (instead of over the air).

(5) **MEMO** Button

Press this button (followed by a message number button) to record a message via the microphone.

(6) **PLAY** Button

After recording received signals, press this button to play them back in the transceiver's loudspeaker.

(7) **REC** Button

Press this button to start the receiver recorder. The recorder will run continuously (recording an 16-second loop) until you press the **STOP** button.

(8) **STOP** Button

Press this button to stop any recording or playback operation.

Receiver Recording

When used in this mode, the DVS-2 maintains a continuous recording of the last (approximately) 16 seconds of audio from the main receiver. This can be particularly helpful in picking out callsigns during a pileup, as you can replay the same recording as often as you like (until you record over it). The record/playback process in this mode is analogous to an 16-second "endless tape" – that is, you can turn the recorder on and off to record up to a total of 16 seconds of small segments of audio, or you can leave the recorder running to get one 16-second segment. In any case, the recorder overwrites data more than 16 (recording) seconds old.

- ☐ To start the receiver recorder just press the **REC** button. The yellow **REC** LED will light (and stay lit).
- ☐ When you hear something you want to play back, press the **STOP** button (the **REC** LED will turn off), and then press the **PLAY** button. Now the green **PLAY** LED will light as recorded audio is played back through the main receiver audio channel.

Note that if you record for less than 16 seconds, playback will start at the point you first started recording (no "rewind" necessary). However, if you record for more than 16 seconds, playback will begin at the point 16 seconds before you *stopped* recording. In either case, playback will repeat any recorded audio every 16 seconds.

You can stop the playback at any time by pressing **STOP**. If you then press **PLAY** again, playback will continue from the point you stopped it.

Receiver Recording with the FT-1000

As the DVS-2 uses only the main receiver audio channel of the FT-1000, you can play back recordings without missing real-time action by using the **A ► B** button on the FT-1000 to set the two VFOs to the same frequency. With stereo headphones, this allows you to continually monitor signals on the sub vfo audio channel while playing back recording on the main channel.

Recording & Transmitting Messages

This mode allows the DVS-2 to record either two 8-second messages or four 4-second messages of audio from the microphone, such as contest exchanges or station IDs. Each can then be played back, either in monitor mode (without transmission), or directly over the air. Note that the digital memory used in this mode is independent from that used for receiver recording (so you can store both types of memory without interfering with one another).

The 8- and 4-second messages share the same memory, so two 4-second message segments (1 and 2 or 3 and 4) can be combined into one 8-second message for transmission, as indicated in the table below.

Memory Segments & Message Numbers

Button Pressed	Segment(s) Used in Record/Playback	
	2 × 8-second Message Mode	4 × 4-second Message Mode
1	Segments 1 & 2	Segment 1
2	Segments 3 & 4	Segment 2
3	no function	Segment 3
4	no function	Segment 4

Message Recording

Before you record for transmission, check that the **MESSAGE MODE** switch is set for the size message you want to record, either 4-second or 8-second (see the table above and the Example in the next section for help with this decision). You do not need to press the PTT switch while recording a message, although you can, in which case your audio will be transmitted and recorded simultaneously.

- ☐ Get your microphone ready, and then press the **MEMO** button (the yellow **REC** LED will blink).
- ☐ Now press the numbered key for the segment (or segment pair) to record (only **1** or **2** for the 8-second mode), and start talking (do *not* press the PTT switch unless you want to transmit at the same time you are recording). The **REC** LED will stop blinking and stay on for the recording period (4 or 8 seconds), and then turn off. Also, the red LED above the

numbered key you pressed will come on (if this segment was previously empty) and stay on, indicating this segment is now storing data. To stop recording at any point *before* the selected segment's time limit is up, simply press **STOP**. This is the preferred method, since it eliminates any "dead time" remaining from your last-recorded word and end of the time segment (which would keep your transmitter unnecessarily keyed for a short period). In any case, your message can not exceed the 4- or 8-second limit.

Don't worry if you didn't have enough time to finish your phrase, you can repeat the above steps to rerecord the same message – the previous message will be overwritten. (Note that there is no "rewind" step required.)

Checking Your Recording Without Transmitting

You can check the contents of a memory segment or pair without playing it back over the air, just by pressing **MONI** followed by the appropriate numbered key. The green **REC** LED blinks until you press the numbered key, and then stays on during the playback period. We recommend always using this to check the results immediately after making a recording and before playing it back over the air. If you have recorded several 4-second segments that you intend to combine during playback, move the **MESSAGE MODE** switch to the **2 x 8 SEC** position to hear how the segments sound when played back together. Note from the table on the preceeding page that, in the 8-second mode, the **1** button plays back segments 1 and 2, while the **2** button plays back segments 3 and 4.

Clearing All Memory

Although it should not normally be necessary, you can clear the contents of all memory (both that used for receive and transmit recording).

- ☐ Using a sharp object, press the switch inside the hole on the left side of the DVS-2 momentarily.
- ☐ Wait at least five seconds, then press the **PLAY** button. The green **PLAY** LED should light.
- ☐ Press the **STOP** button.

"On The Air" Playback

After recording a memory segment, you can play it back over the air by pressing the appropriate numbered button. The green **PLAY** and red **TX** LEDs will both light for a maximum of either four or eight seconds, according to the setting of the **MESSAGE MODE** switch.

Example of Combining Messages for Transmission

Since you will probably want to take advantage of combining messages for playback, you may want to take a few minutes to plan out your segment recording strategy. Consider the following example:

Using the 4 segment-by-4-second mode, if you stored the segments like this:

Segment 1: "CQ Contest CQ Contest CQ Contest from"

Segment 2: [your callsign]

Segment 3: "QSL, you're 5-9, 200" (or whatever contest exchange is appropriate)

Segment 4: "QRZ Contest from [your callsign]"

In the contest, you would then,

- ☐ Switch to the 2-segment-by-8-second mode to combine the segment pairs,
- ☐ Press button **1** to send segments 1 & 2 ("CQ Contest CQ Contest CQ Contest from [your callsign]") until you got a response,
- ☐ Send the other station's callsign,
- ☐ Press button **2**, to send segments 3 & 4 ("QSL, your 5-9, 200...QRZ Contest from [your callsign]").

Notice in this example, you can operate the entire contest while only having to send the other station's callsign by voice – all repetitive information is handled by the DVS-2 (of course, in contests where you need to include a QSO count, you would want to arrange the segments a little differently, perhaps using the 4-by-4-second mode for transmissions).

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